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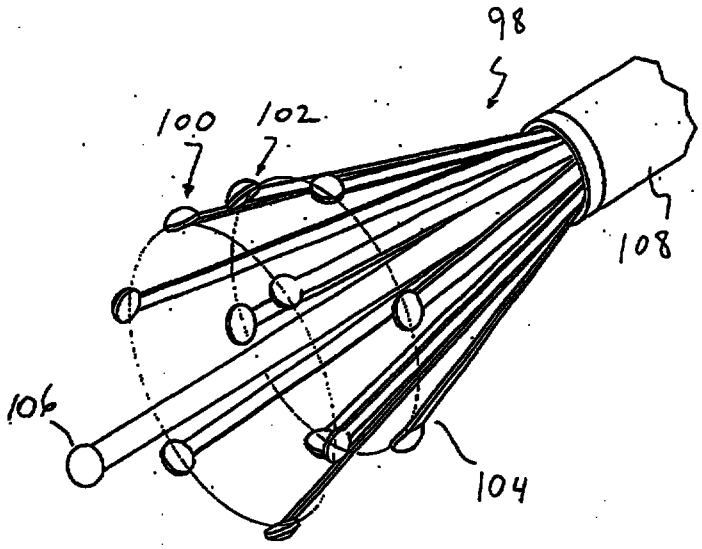
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(54) Title: ELECTROCATHETER FOR INDUCING VESSEL STENOSYS HAVING TWO ARRAYS OF DIVERGING ELECTRODES



(57) Abstract

A catheter includes a first plurality of expandable leads (100) and a second plurality of expandable leads (102) separate and longitudinally spaced–apart from the first plurality to deliver energy to a hollow anatomical structure, such as vein, fallopian tube, hemorrhoid, esophageal varix, to effectively ligate that structure. Each of the leads includes an electrode located at the distal end of the respective electrode lead. Polarizations of the leads may be selected to achieve the power distribution desired. Each electrode lead includes an outward bend such that when a movable sheath (108) is moved out of contact with the leads, they expand outwardly into apposition with an inner wall of the structure to be ligated. High frequency energy can be applied from the leads to create a heating effect in the surrounding tissue of the anatomical structure. The diameter of the hollow anatomical structure is reduced by the heating effect, and the electrodes are freely moved inward by the shrinking structure while still maintaining apposition with the inner wall of the shrinking structure.